

Economic Conditions

Appendix J contains a detailed comparison of the economic effects of each alternative.

Grazing-Related Economic Effects. By the end of 20 years, this alternative would generate additional income for the livestock permittees of \$971,000 annually. This is based on ranch budget results. The effects by size group are shown in Table 4-2. This would be a 73 percent increase over current income generated by BLM grazing use in the planning area. This would be less than a 1 percent increase in income to the agricultural sector of the economy. Grazing-related employment would increase by 53 jobs. This would be roughly a 1 percent increase in agriculture sector employment.

TABLE 4-2
LIVESTOCK INCOME AND EMPLOYMENT CHANGES
ALTERNATIVE B

| Size Group | Proposed Grazing Use | Change in Use | Income Change | Employment Change |
|------------|----------------------|---------------|---------------|-------------------|
| 1 | 17,805 | + 6,183 | + \$115,283 | + 6.3 |
| 2 | 34,262 | +11,899 | + \$221,842 | +12.2 |
| 3 | 52,444 | +18,213 | + \$339,562 | +18.7 |
| 4 | 45,466 | +15,790 | + \$294,382 | +16.2 |
| Total | 149,977 | +52,085 | + \$971,069 | +53.4 |

The secondary (multiplier) effect of this alternative would add another \$605,200 in earnings to the local economy and an additional 33 jobs.

There would be a total of \$2,522,000 spent on range improvements under this alternative. This would convert to earnings of \$1,447,900 and 65 jobs. This would be short term in nature and the jobs would only last until the improvements were installed. In addition, there would be annual maintenance costs of \$42,100, which would convert to annual income of \$24,200. This would add one job to the local economy.

Grazing fee collections would be increased with this alternative in the following manner:

| | |
|------------------------|-------------|
| Range Improvement Fund | + \$ 52,085 |
| Federal Treasury | + \$ 39,064 |
| State of Idaho | + \$ 13,021 |
| Total | + \$104,170 |

The total capital value of the AUMs gained would amount to between \$2.9 million and \$13.1 million.

Effects of the Alternatives
Alternative B

Recreation-Related Economic Effects. By the end of 20 years, the annual direct and secondary income generated by recreation-related activities would increase by \$1.9 million over present levels. This would represent a 13 percent increase in retail trade earnings over present levels. There would be approximately 185 jobs added in recreation-related employment by year 20. This would be an increase of 13 percent over current retail trade employment.

Crop Agriculture-Related Economic Effects. This alternative could lead to development for irrigated agriculture of 43,510 acres (assuming allowances on all acres). This is made up of 5,330 acres of Desert Land Act development and 38,180 acres of Carey Act development. This is assumed to equate to 207 new farms of 210 acres each.

Electricity would be used to pump water from the Snake River Aquifer for irrigating these acres. In addition, water withdrawals from the aquifer reduces the stream flow in the river and thus reduces power production at dams downstream. It is estimated that each acre irrigated either uses or prevents generation downstream of 5,629 kwh (Chaney 1977, Hamilton and Lyman 1983, USDI-BLM 1979, Jones 1981). Electricity costs would range from 6.4 cents per kwh for electricity lost from downstream generated to 8.5 cents per kwh for electricity consumed pumping (Hamilton and Lyman 1983). The studies cited above indicate that the total electricity use/loss is evenly split with 2,801 kwh/acre used pumping (49.8 percent) and 2,828 kwh/acre lost from generated downstream (50.2 percent). The total cost of electricity used and lost would be \$18.3 million (5,629 kwh/acre x 43,510 acres x \$.0745/kwh [8.5 cents + 6.4 cents = 14.9 divided by 2 = 7.45 cents/kwh]). Current Idaho Power Company rates for irrigators are 2.3 cents per kwh used and \$2.25 per kw of demand*. This would equate to irrigators paying \$2.9 million (16 percent) and other electricity consumers in the Columbia River System paying \$15.4 million (84 percent).

The potential production of crops resulting from agricultural development would be 11 percent of current planning area production of alfalfa, 18 percent of barley production, and 36 percent of potato production. Total potential production would be: Alfalfa - 48,486 tons; barley - 806,912 bushels; potatoes - 3,462,907 cwt. In the case of potatoes, it has been estimated that a 1 percent increase in nationwide production leads to a 6.6 percent decrease in price (Schermerhorn 1977). The production of 3.46 million cwt would be 1 percent of national production (318.3 million cwt in 1980). On the other hand, a study done for BLM in 1979 (Blakeslee 1979) indicated that for every 100 acres of new potato acreage in southwest Idaho, 90 acres of existing potato acreage would go out of production somewhere else in Idaho, the northwest, or the nation. It is assumed that this would hold true for southcentral Idaho as well. This would mean that the net addition to national potato production would be only 346,291 cwt, or 0.1 percent of national production. The impact on overall potato prices would be minimal. The Blakeslee study stated that "the displacement effect need not represent a great decline in economic well-being among those who leave or reduce potato production. This is because it is not the average producing unit which leaves under such circumstances. Rather, it is the one for which potato production was originally only a marginal choice relative to the next best economic alternative. Presumably,

*Personal Communication, Idaho Power Company 1984.

not much economic well-being is lost when such units take up the next best alternative rather than continue in potato production" (Blakeslee 1979). Data on the production and price relationships of other crops is not available. The development of irrigated agriculture on 43,510 acres could lead to one-time costs of installing water delivery and irrigation systems of \$13.9 million (\$67,000 per farm x 207 farms). Annual expenditures for seed, fertilizers, herbicides, and fungicides would be \$7.5 million (BLM 1984). An additional \$1.2 million would be spent on fuel for tractors and equipment (Powell and Lindeberg 1981). See Appendix J for the basic assumptions and resulting farm budgets used in this analysis.

Agricultural development would increase farm income by \$6,731 per farm (see Chapter 3). This would be a total direct income gain of \$1.4 million with this alternative (\$6,731 x 207 farms). There would be secondary income gains resulting from the expenditures made for farm operations identified above. The total annual expenditures would be \$8.7 million (\$7.5 million for seed, fertilizers, etc. and \$1.2 million for fuel). The earning to gross output ratio for the wholesale and retail trade industry is 0.3969 (see Chapter 3, page 3-36). This means that this level of expenditures would convert to earnings of \$3.4 million. Ranchers currently using these areas to graze livestock would lose a total of 8,648 AUMs. Based on the ranch budgeting results, it is estimated that each lost AUM would reduce permittee income by \$18.60. This means that the AUMs lost due to agricultural development would reduce total rancher income by \$160,900. Based on the gross output multipliers for the livestock industry (found in Chapter 3, page 3-36), it is estimated that there would be secondary income losses of approximately \$248,800 associated with the reduction in rancher income. In addition, ranchers could lose capital value due to lost grazing privileges in the range of \$480,700 to \$2,162,000 (Boly 1980, Fowler and Gray 1980). It should be noted that overall grazing levels are increased under this alternative (see above) and these impacts pertain only to those permittees currently using the land to be developed for irrigated agriculture for grazing.

Farm employment would increase by the full-time equivalent (FTE) of 77 jobs. Secondary employment from the development of 207 new farms would increase by the full-time equivalent of 350 jobs. Ranch employment would decline by the full-time equivalent of 9 jobs, while ranch-related secondary employment would decline by 14 FTEs. The total net employment change would be a gain of 68 direct and 336 secondary or 404 total full-time equivalents.

Land Transfers. This alternative would have a land transfer benefit of \$3,678,400. Desert land and Carey Act transfers were not valued since the government gets virtually no payment for them and disposal of these tracts may or may not reduce operating costs. The economic value of such developments was estimated in the above discussion.

Fire Suppression. Annual fire suppression costs would total \$302,400. An additional \$6,000 would be spent to maintain roads for fire breaks and for getting equipment to fire locations.

Effects of the Alternatives
Alternative B

Summary. Total earnings (direct and secondary) would be increased by \$7.9 million and employment by 676 jobs. The costs for range improvements and fire suppression would amount to \$476,600 annually. The livestock industry would receive significant benefits, partly at the expense of recreation-related activities. Some income and employment losses would occur in the livestock industry as a result of agricultural development. The crop agriculture industry would also receive significant benefits, largely at the expense of other ratepayers (including existing farmers) in the Columbia River system that would pay 84 percent of the total cost of electricity.

Alternative C

Fire Management

No change in acres burned and no change in number of fires are anticipated in this alternative. There would be an increase within the Sand Butte WSA (6 percent increase), but this would be offset by the increase in grazing (3 percent decrease) and the increase in road maintenance (3 percent decrease). The Sand Butte WSA has shown numerous starts in the area and has had three large fires within the area in the last 25 years. This has been with total suppression action. With no or limited action, the size and frequency of large fires should increase greatly. Efforts to keep fires originating outside the WSA from entering the WSA would increase suppression costs.

Increases would be averages measured on a long term basis. The number of fires and acres burned varies greatly from year to year.

Wildlife

Under this alternative, it is assumed only 5 of the 87 Isolated Tracts would be transferred from Federal ownership and converted to agricultural use. Other tracts would be dropped from the Isolated Tracts program but not transferred. The Bureau of Reclamation development would include five existing Isolated Tracts which would be managed by Reclamation for wildlife habitat. Some tracts would be added to the Isolated Tracts program. The net result would be 92 Isolated Tracts in the planning area.

Where specific numbers of animals are listed below, we anticipate that 50 percent of the change would occur within 5 years, and the remaining 50 percent within 20 years. Refer to Appendix C, "Methodology" for an explanation of how the numbers were derived.

Bliss Rapids Snail (Candidate Endangered). Under this alternative, the habitat of the snail would be afforded greater protection through designation of Box Canyon/Blueheart Springs and Vineyard Creek as ACECs. Even though other uses would be allowed, the type and degree of development would be limited so as not to deplete the habitat value for this species.

Ferruginous Hawk (Candidate Threatened). A population increase could be expected as a result of the placement of artificial nest structures. The only known nest site plus excellent potential sites for nest structures would receive additional protection from disturbing influences of future developments if the Sand Butte and Raven's Eye WSAs are designated wilderness.

Swainson's Hawk (Candidate Threatened). An unknown population increase could be expected because the 92 wildlife tracts would be maintained in habitat suitable for this species. By maintaining a large number and variety of these tracts, chances of success in attracting breeding Swainson's hawks are increased.

Burrowing Owl (Sensitive). A net gain of eight breeding pairs could be expected. The positive effect of artificial nest site placement and burrow protection on the 92 Isolated Tracts would only be partially offset by transfer of habitat and conversion to agriculture. Some transfers would probably result in an improved habitat for this species by providing a greater prey base associated with certain agricultural crops. Transfers could also result in an increased availability of suitable nest sites through creation of rock piles in newly opened fields.

Shoshone Sculpin (Candidate Endangered). Under this alternative, the habitat of the Shoshone sculpin would be afforded a greater degree of protection through designation of Box Canyon and Blueheart Springs as an ACEC. Even though other uses may be allowed, the type and degree of development would be limited so as not to deplete the habitat value for this sensitive species. ACEC designation would give priority to managing for the needs of the species.

Ring-Necked Pheasant. A net increase of 6,600 birds could be expected. Substantial population increases would result from protection and improvement of winter and nesting cover on Isolated Tracts and on Bureau of Reclamation transfer lands. There would be a smaller positive effect as a result of agricultural development on transfer lands that are not currently suitable pheasant habitat. Only part of these benefits would be offset by loss of habitat on other transfer lands.

Effects of the Alternatives
Alternative C

Gray Partridge (Hungarian Partridge). A net increase of 1,100 birds could be expected for the same reasons as those cited for pheasants.

Sage Grouse. A net population increase of 1 percent could be expected. There would be an improved forb component in prescribed burn areas and in some seedings for livestock forage. These forbs would be made available to grouse by the creation of a mosaic of treated and untreated areas where forage and cover would be in proximity. Development and implementation of a HMP for sage grouse would maintain high winter survival and improve brood rearing success.

Pronghorn. A net loss of 11 animals could be expected. Development and implementation of a HMP for pronghorn winter habitat would help increase winter survival. Development of a summer range HMP would also benefit pronghorn. Positive effects would result from seedings and brush protection on Isolated Tracts that would improve winter range and fawning cover. However, these would be offset by greater negative effects of the transfer of land, much of which is historic winter range.

Mule Deer. A net loss of two deer could be expected due to transfer of public lands and a loss of habitat for resident deer. Losses due to transfer would be greater, but those negative effects would be offset by seedings and brush protection on Isolated Tracts that would be of value to resident deer and some wintering animals. Implementation of a HMP for pronghorn winter range would benefit some wintering deer.

Hybrid Cutthroat/Rainbow Trout. Under ACEC designation, the spawning habitat of this unique population would receive greater attention than without such designation.

Non-Game Species. A net loss of 3,200 pairs of breeding birds could be expected as a result of the conversion of identified tracts to agricultural use. The increase expected on Isolated Tracts and in brush pocket protection areas would be too low to completely offset this loss.

Livestock Forage

Grazing Management. This alternative would result in 142,879 AUMs of livestock forage available in the long term. This would represent a 46

percent (44,987 AUMs) increase in use from the five-year average actual use and a 4 percent (6,256 AUMs) decrease from present active preference (149,135 AUMs).

There would be 11,678 AUMs lost due to land disposal and lands devoted to other public uses. Transfer of land from Federal ownership would significantly affect (more than 10 percent of active preference) 34 allotments and 56 permittees. Twenty-one allotments would be lost completely because of land transfer.

Reductions from active preference to bring grazing levels within carrying capacity would take place on seven allotments, for a total of 8,427 AUMs. This would affect 37 permittees.

An increase from present active preference of 10,264 AUMs would be realized from past management and land treatment in the short term. This would affect five allotments.

Wildfire would have a significant effect within the planning area. An average of 5,667 AUMs would be lost temporarily. This is a result of removing livestock for two growing seasons to allow for vegetation recovery.

An estimated 21,910 sheep AUMs would be converted to cattle AUMs. As a result, the amount of nonuse attributable to the continued decline of the sheep industry would be reduced.

There would be no significant impact on permittees in allotments proposed for new AMP or CRMP development. Six of these plans would be prepared to implement conversion of sheep to cattle. In these allotments, permittees would have to spend more time on maintenance of range improvements, but would spend much less time tending livestock. One of the plans would alter existing management and another would implement a new management system. In these allotments, permittees would have to spend some additional time on maintenance of range improvements and tending livestock. The remaining proposed AMPs or CRMPs would formalize existing management in an allotment.

See Table D-3 in Appendix D for allotment specific information.

Vegetation. A 48 percent increase in AUMs (from actual use) is proposed for this alternative. Seedings are proposed for 25,500 acres, and 19,000 acres of brush control are planned. Land treatments and other range developments would provide support for the increased forage demand and vegetation responses would be similar to those projected under Alternative B. The projected trends for Alternative C are:

| | |
|----------|------------|
| Upward | 20 percent |
| Stable | 76 percent |
| Downward | 4 percent |

Changes in condition classes for this alternative would be limited to a shift from poor condition to seeded on 2 percent of the planning area. The expected condition class breakdown would be:

Effects of the Alternatives
Alternative C

| | |
|--------|------------|
| Good | 2 percent |
| Fair | 8 percent |
| Poor | 68 percent |
| Seeded | 22 percent |

Refer to Appendix D, "Projecting Ecological Condition and Trend" for an explanation of how the projections above were derived.

The Substation Tract would be designated an ACEC in this alternative. Special management considerations could be implemented and significant scientific values would be preserved. Land disposal actions would prevent designation of the Silver Sage Playa as an ACEC. This action would cause loss of this relict area.

Threatened and Endangered Plants. Proposed land treatments may have an effect on the Picabo milkvetch (Astragalus oniciformis), which is proposed for Federal listing as Endangered. Consultation procedures with U.S. Fish and Wildlife Service (FWS) regarding impacts to this species will be followed prior to any treatments. No detriment is expected from proposed stocking levels.

Lands

Under this alternative, 54,420 acres could be transferred, including 2,155 acres now under DLE application and 24,415 acres now under Carey Act application. This does not include 3,751 acres to be developed by the Bureau of Reclamation. Other disposals include sales, exchanges, and R&PPs.

Desert Land Entry applications for 3,415 acres would be denied as would 14,005 acres under Carey Act application.

Impacts associated with lands transfers are the same as identified in Alternative A. Because of the greater amount of acreage involved, the impacts would, correspondingly, also be greater.

Land uses would be restricted to those compatible with wilderness management on 87,902 acres. For example, ORV use would be prohibited and no utility developments could be installed.

In addition to the wilderness acres discussed above, lands activities would be limited to those not involving motor vehicle use on 2,201 acres. For example, a right-of-way application might be denied or modified because motor vehicles could not be used to install or maintain developments.

Other non-transfer lands actions would continue under constraints set out in the resource management guidelines (see Chapter 2) and Standard Operating Procedures (see Appendix E) with the same general impacts identified in Alternative A.